

IN THE CLAIMS:

Claims 1-12 have been amended herein. New claims 13 through 18 have been added herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

a | sub b)
1. (Currently Amended) A method for insulating or thermally protecting a rocket motor assembly comprising: ~~a rocket motor casing, a propellant, and a nozzle assembly, said process comprising (a)~~ forming a ~~rocket motor ablative material from a prepreg comprising at least one impregnating resin matrix and a reinforcement structure comprising, as a precursor prior to carbonization, at least one aromatic polyamide;~~ impregnating the reinforcement structure with a resin matrix to form a rocket motor ablative material; and (b) insulating or lining a portion of the rocket motor assembly with the rocket motor ablative material.

2. (Currently Amended) The method of claim 1, wherein forming a reinforcement structure comprising at least one aromatic polyamide comprises forming the reinforcement structure comprises comprising carded and yarn-spun staple aramid fibers.

3. (Currently Amended) The method of claim 1, wherein forming a reinforcement structure comprising at least one aromatic polyamide comprises forming the reinforcement structure comprises comprising yarn-spun aramid filaments.

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4. (Currently Amended) The method of claim 1, wherein forming a reinforcement structure comprising at least one aromatic polyamide comprises forming the reinforcement structure comprises comprising at least one member selected from the group consisting of aramid felt and aramid flock.

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5. (Currently Amended) The method of claim 1, wherein said insulating or lining of a portion of the rocket motor assembly with the rocket motor ablative material comprises applying the rocket motor ablative material as a bulk ablative material of an exit nozzle liner.

6. (Currently Amended) The method of claim 1, wherein said insulating or lining of a portion of the rocket motor assembly with the rocket motor ablative material comprises applying the rocket motor ablative material as a bulk ablative material of a reentry vehicle nose cone.

7. (Currently Amended) A method for insulating or thermally protecting a rocket motor assembly comprising: a rocket motor casing, a propellant, and a nozzle assembly, said process comprising (a) forming a rocket motor ablative material from a prepreg comprising at least one impregnating resin matrix and a reinforcement structure comprising, as a precursor prior to carbonization, at least one poly(meta-arylaramid); impregnating the reinforcement structure with a resin matrix to form a rocket motor ablative material; and (b) insulating or lining a portion of the rocket motor assembly with the rocket motor ablative material.

8. (Currently Amended) The method of claim 7, wherein forming a reinforcement structure comprising at least one poly(meta-arylaramid) comprises forming the reinforcement structure comprises comprising carded and yarn-spun staple aramid fibers.

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9. (Currently Amended) The method of claim 7, wherein forming a reinforcement structure comprising at least one poly(meta-arylaramid) comprises forming the reinforcement structure comprisescomprising yarn-spun aramid filaments.

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10. (Currently Amended) The method of claim 7, wherein forming a reinforcement structure comprising at least one poly(meta-arylaramid) comprises forming the reinforcement structure comprisescomprising at least one member selected from the group consisting of aramid felt and aramid flock.

11. (Currently Amended) The method of claim 7, wherein said insulating or lining of a portion of the rocket motor assembly with the rocket motor ablative material comprises applying the rocket motor ablative material as a bulk ablative material of an exit nozzle liner.

12. (Currently Amended) The method of claim 7, wherein said insulating or lining of a portion of the rocket motor assembly with the rocket motor ablative material comprises applying the rocket motor ablative material as a bulk ablative material of a reentry vehicle nose cone.

13. (New) The method of claim 1, wherein forming a reinforcement structure comprising at least one aromatic polyamide comprises forming the at least one aromatic polyamide into a yarn.

14. (New) The method of claim 13, wherein forming a reinforcement structure comprising at least one aromatic polyamide comprises structuring the yarn into a desired structure.

15. (New) The method of claim 14, wherein forming a reinforcement structure comprising at least one aromatic polyamide comprises carbonizing the desired structure.

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16. (New) The method of claim 7, wherein forming a reinforcement structure comprising at least one poly(meta-arylaramid) comprises forming the at least one poly(meta-arylaramid) into a yarn.
17. (New) The method of claim 16, wherein forming a reinforcement structure comprising at least one poly(meta-arylaramid) comprises structuring the yarn into a desired structure.
18. (New) The method of claim 17, wherein forming a reinforcement structure comprising at least one poly(meta-arylaramid) comprises carbonizing the desired structure.